predetermined distance for allowing an axial movement of the flywheel along with the elastic plate 2. A radially extending inner surface 5f of the flywheel facing the elastic plate 2 is spaced apart from the elastic plate 2 by a predetermined distance for ensuring an elasticity of the elastic plate 2. In other words, a first clearance or second free space is provided between inner surface 5f and the elastic plate 2 for allowing axial movement of the flywheel body.

IN THE CLAIMS:

Please cancel claims 69-100 without prejudice or disclaimer. Original patent claims 1-12, previously cancelled, are reproduced below with bracketing in accordance with 37 C.F.R. § 1.121(b)(2)(i)(c).

[1. A flywheel for a power transmission system for transmitting engine torque to a driven unit, comprising:

an elastic plate secured to a crankshaft to rotate therewith;

a flywheel body secured to said elastic plate and having an engageable surface for engaging with a clutch disc; and

a reinforcing member for reinforcing said elastic plate at a portion of said elastic plate which is secured to said crankshaft;

said elastic plate having an axial rigidity in the range of 600 kg/mm to 2200 kg/mm so as to ensure transmission of engine torque to said driven unit while decreasing noise produced by a bending vibration of said crankshaft;

wherein each of said elastic plate, said flywheel body and said reinforcing member comprises a first portion, said first portion of said flywheel body being placed axially between said first portions of said elastic plate and said reinforcing member, and said first portions of said elastic plate, said flywheel body and said reinforcing member defining clearances for allowing said first portion of said flywheel body to move axially between said first portions of said elastic plate and said reinforcing member.

2. A flywheel as set forth in claim 1, wherein said axial rigidity is in the range of 600 kg/mm to 1700 kg/mm.

3. A flywheel as set forth in claim 2, wherein an axial run-out of said engageable surface when rotated by said crankshaft is no more than 0.1 mm.

4. A flywheel according to claim 1, wherein said reinforcing member (4) and said elastic plate (2) are fastened to said crankshaft (1) by a fastening means (3), and said elastic plate is clamped between said crankshaft and said reinforcing member.

5. A flywheel according to claim 4, wherein said elastic plate is circular and comprises an outer peripheral portion (2*b*) surrounding said first portion of said elastic plate, so that said first portion of said elastic plate is an inner portion of said elastic plate, said flywheel body comprises an outer peripheral portion (5*a*) which surrounds said first portion of said flywheel body, so that said first portion of said flywheel body is an inner portion of said flywheel body, said outer peripheral portions of said elastic plate and said flywheel body are fastened together by a second fastening means (6), said inner portion of said flywheel body comprises an inwardly facing inside cylindrical surface defining a central circular hole (5*b*), said reinforcing member comprises a cylindrical portion (4*a*) which is received in said circular hole (5*b*) of said flywheel body, and comprises an outwardly facing outside cylindrical surface surrounded by said inwardly facing cylindrical surface of said flywheel body, said first portion of said reinforcing member is in the form of an outward flange (4*b*), said first portion of said flywheel body is slidably mounted on said cylindrical portion of said reinforcing member so that said first portion of said flywheel body is axially slidable between said inner portion of said elastic plate and said outward flange of said reinforcing member.

6. A flywheel according to claim 4, wherein said inner portion of said flywheel body comprises a first surface (5f) which is substantially parallel to said engageable surface (5g) and which faces toward said elastic plate, and a second surface (5d) which is substantially parallel to said engageable surface and which faces toward said outward flange of said reinforcing member, said inner portion of said elastic plate comprising an abutting surface confronting said first surface of said flywheel body and limiting an axial movement of said inner portion of said elastic plate by abutting against

said first surface of said flywheel body, said outward flange of said reinforcing member comprises an abutting surface confronting said second surface of said flywheel body and limiting the axial movement of said inner portion of said flywheel body by abutting against said second surface of said flywheel body, an axial distance between said first and second surfaces of said flywheel body is smaller than an axial distance between said abutting surfaces of said elastic member and said reinforcing member.

7. A flywheel according to claim 6, wherein said second surface (5d) of said inner portion of said flywheel body is located axially between said first surface (5f) and said engageable surface (5g) of said flywheel body.

8. A flywheel for a power transmission system for transmitting engine torque to a driven unit, comprising:

an elastic plate secured to a crankshaft to rotate therewith;

a flywheel body secured to said elastic plate and having an engageable surface for engaging with a clutch disc; and

a reinforcing member for reinforcing said elastic plate at a portion of said elastic plate which is secured to said crankshaft; and

said engageable surface having an axial run-out which is equal to or less than 0.1 mm;

wherein each of said elastic plate, said flywheel body and said reinforcing member comprises a first portion, said first portion of said flywheel body being placed axially between said first portions of said elastic plate and said reinforcing member, and said first portions of said elastic plate, said flywheel body and said reinforcing member defining clearances for allowing said first portion of said flywheel body to move axially between said first portions of said elastic plate and said reinforcing member.

9. A flywheel assembly comprising:

a driving shaft (1) for transmitting torque;

a circular elastic member (2) comprising an outer portion and an inner portion and extending radially inwardly from said outer portion to said inner portion, said inner portion of said elastic member being fastened to a shaft end of said driving shaft;

an annular flywheel member (5) comprising an outer portion and an inner portion and extending radially inwardly from said outer portion to said inner portion of said flywheel member, said outer portion of said flywheel member being fastened to said outer portion of said elastic member, said inner portion of said flywheel member comprising a central circular hole; and

a reinforcing member (4) comprising a cylindrical portion (4a) axially extending from a first end to a second end, an inner portion extending radially inwardly from said first end of said cylindrical portion, and an outward flange (4b) extending radially outwardly from said second end of said cylindrical portion, said inner portion of said reinforcing member being fastened to said shaft end of said driving shaft, said cylindrical portion of said reinforcing member being fit in said circular hole of said flywheel member with a clearance to form a loose fit;

wherein said inner portion of said elastic member is fixedly clamped between said shaft end of said driving shaft and said inner portion of said reinforcing member, said inner portion of said flywheel member is loosely fit over said cylindrical portion of said reinforcing member and located axially between said inner portion of said elastic member and said outward flange of said reinforcing member, said outward flange is axially spaced from said inner portion of said elastic member at an axial distance which allows axial movement of said inner portion of said flywheel body between said inner portion of said elastic member and said outward flange of said reinforcing member.

10. A flywheel assembly according to claim 3, wherein said elastic member has an axial rigidity which is in the range of 600 kg/mm to 2200 kg/mm.

11. A flywheel assembly according to claim 9, wherein a wall thickness of said inner portion of said reinforcing member is greater than a wall thickness of each of said outward flanges of said reinforcing member and said inner portion of said elastic member, said wall thickness of each of said inner portion and said outward flange of said reinforcing member and said inner portion of said elastic member being a dimension measured in an axial direction parallel to an axis of said driving shaft.